

AMENDMENTS TO THE CLAIMS

WHAT IS CLAIMED IS:

1. (Currently amended) A method of identifying a candidate beta catenin ~~pathway~~ modulating agent, said method comprising the steps of:
 - (a) providing a first assay system capable of detecting Protein Kinase C iota (PRKC- ι) expression comprising a PRKC- ι nucleic acid;
 - (b) contacting the assay system of step (a) with a test agent;
 - (c) measuring the expression of PRKC- ι in the presence or absence of the test agent;
 - (d) identifying a candidate beta catenin modulating agent by detecting a change in the expression of PRKC- ι in the presence of the test agent compared with no test agent;
 - (e) providing a second assay system capable of detecting a change in the activity of beta catenin ~~pathway~~ comprising cultured cells expressing PRKC- ι ;
 - (f) contacting the assay system of step (e) with the candidate test agent of step (b);
 - (g) measuring the activity of beta catenin ~~pathway~~ in the presence or absence of the test agent; and
 - (h) confirming that the test agent of step (b) is a candidate beta catenin modulating agent by detecting a change in the activity of beta catenin ~~pathway~~ in the presence or absence of the test agent.
2. (Previously presented) The method of Claim 1, wherein the first assay system comprises cultured cells that express the PRKC- ι polypeptide.
3. (Previously presented) The method of Claim 2, wherein the cultured cells additionally have defective beta catenin function.
4. (Withdrawn) The method of Claim 1 wherein the assay system includes a screening assay comprising a PRKC polypeptide, and the candidate test agent is a small molecule modulator.

5. (Withdrawn) The method of Claim 4 wherein the screening assay is a kinase assay.

6. (Currently amended) The method of Claim 1, wherein the second assay system is selected from ~~the group consisting of an apoptosis assay system, a cell proliferation assay system, an angiogenesis assay system, and a hypoxic induction assay system~~ a nuclear beta catenin measurement assay and a beta catenin gene reporter assay.

7. (Withdrawn) The method of Claim 1 wherein the assay system includes a binding assay comprising a PRKC polypeptide and the candidate test agent is an antibody.

8. (Previously presented) The method of Claim 1, wherein the first assay system includes an expression assay comprising a PRKC- ι nucleic acid and the candidate test agent is a nucleic acid modulator against PRKC- ι .

9. (Previously presented) The method of claim 8, wherein the nucleic acid modulator is an antisense oligomer.

10. (Previously presented) The method of Claim 8, wherein the nucleic acid modulator is a phosphorodiamidate morpholino oligomer (PMO).

11. (Previously presented) The method of Claim 1 wherein the cultured cells in the second assay system additionally have defective beta catenin function.

12. (Canceled)

13. (Withdrawn) A method for modulating a beta catenin pathway of a cell comprising contacting a cell defective in beta catenin function with a candidate modulator that specifically binds to a PRKC polypeptide, whereby beta catenin function is restored.

14. (Withdrawn) The method of claim 13 wherein the candidate modulator is administered to a vertebrate animal predetermined to have a disease or disorder resulting from a defect in beta catenin function.

15. (Withdrawn) The method of Claim 13 wherein the candidate modulator is selected

from the 25 group consisting of an antibody and a small molecule.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Withdrawn) A method of modulating beta catenin pathway in a mammalian cell comprising contacting the cell with an agent that specifically binds a PRKC polypeptide or nucleic acid.

21. (Withdrawn) The method of Claim 20 wherein the agent is administered to a mammalian animal predetermined to have a pathology associated with the beta catenin pathway.

22. (Withdrawn) The method of Claim 20 wherein the agent is a small molecule modulator, a nucleic acid modulator, or an antibody.

23. (Withdrawn) A method for diagnosing a disease in a patient comprising:
obtaining a biological sample from the patient;
contacting the sample with a probe for PRKC expression;
comparing results from step (b) with a control;
determining whether step (c) indicates a likelihood of disease.

24. (Withdrawn) The method of claim 23 wherein said disease is cancer.

25. (Withdrawn) The method according to claim 24, wherein said cancer is a cancer as shown in Table 1 as having >25% expression level.